

1. Cost of Health Care in Alaska

How much does it cost? (AK)

Spending for health care in Alaska approached \$7.5 billion in 2010; roughly 47% of the wellhead value of oil produced in Alaska. In 1990, health care spending in Alaska was roughly \$1.6 billion or roughly 16% of the wellhead value of oil. The compound annual growth rate in health care spending averaged 8 percent per year over the two decades from 1990-2010. After we factor out population growth, spending for health care increased 7.2% per year per capita over the previous two decades – compared with 7.0% per year per capita for the U.S. as a whole.

Who pays? Directly and Indirectly (AK)

Roughly 20% of the direct costs for health care are paid for by households in out of pocket expenses (deductibles, co-pays, and services not covered by insurance), payroll deductions (employee allocation of employment sponsored health insurance costs) and direct payment of premiums; roughly 40% of the initial direct costs for health care were paid by employer (business, federal, state, local gov't including school districts) contributions toward pre-tax health benefits, and another 40% of the initial direct costs for health care were paid by government sponsored health program coverage (Medicare, Medicaid, TRICARE, VA, Indian Health Service). Of course, households indirectly pay all these costs because they buy goods and services from employers and they pay taxes.

What are we buying? (AK)

Roughly 72% of Alaska's health care spending is for hospital care and physician services. Prescription drugs accounted for 8% and dental care accounted for another 6%. Roughly 11% of Alaska's health care spending is for other personal services, including home and community based services, school and worksite based care, and nursing home care. Another 3% is spent on medical equipment and products.

Who are the high cost and low cost patients? (U.S.)¹

Based on national statistics, there are general patterns of expenditure that are noteworthy. In any given year, roughly 15% of the population does not incur any health care costs. Another 35% of the population has one visit to a physician or dentist with an average bill of roughly \$340. Between the two low cost groups, roughly half of the population generates 3% of health care spending in a year. At the other end of the cost spectrum, 5% of the population generates 50% of health care costs, averaging over \$38,000 per year, frequently including a hospitalization, multiple physician visits and a few thousand on prescription drugs. The average age of the high cost patients is 57, and only about a third of the 5% driving 50% of the cost are Seniors (65 and older) on Medicare – but the proportion of high cost patients on Medicare is expected to change as the baby boomers age into Medicare over the next ten years.

¹ Medical Expenditure Panel Survey (MEPS), Household Component and Statistical Brief #309, 2010

Do we use more medical care? (U.S. vs. OECD Countries)

After adjusting for age, income and disease differentials, U.S. patients tend to use similar amounts of health care as measured by physician visits, diagnostics tests and prescription drugs when compared to other OECD countries. Even after adjusting for age, the U.S. has lagged behind OECD European countries with respect to senior services – both skilled nursing facilities and home and community based care. The primary difference between the U.S. and other OECD countries health systems is the price of services and the overhead associated with the private health insurance system [McKinsey Global, January 2007].

While many OECD countries have a single payer system, some, including Switzerland and France, have a mixed system that includes private health insurance. In the case of Switzerland, roughly 1/3rd of health care is financed through direct patient copayments compared to 11% in the U.S. Health care expenditures have been growing rapidly across OECD countries. The development of supply (expanded facilities, growing specialization, and greater use of technology) is frequently cited as a primary driver of the cost growth [Hertzlinger, et al, 2004].

Are we healthier than we used to be? (U.S. & Alaska)

Over the two decades from 1990-2010, many Alaska health determinants (risk factors) and outcome measures have improved faster and farther than the U.S. as a whole, including infant mortality and infectious disease rates. In addition, Alaska has reduced its prevalence of smoking faster (but not farther) than the U.S. and Alaska has restrained its growth in the prevalence of obesity so that it now lags behind the U.S. Alaska has reduced its death rate associated with heart disease slightly faster (-34%) than the U.S. (-31%) and similarly has reduced its death rate associated with cancer slightly faster (-7%) compared to the U.S. (-3%). Alaska's rate of preventable hospitalizations per 1000 Medicare patients is 20% lower than the U.S. (56.8 vs. 70.6). [United Health Foundation, America's Health Rankings, 2010]

The age adjusted life expectancy at birth in Alaska is 78.5 vs. 78.0 for the U.S. (2007 data) [CDC, 2010]

2. Cost Growth

Historic – AK & US

While Alaska's rate of growth in health care spending per capita over the two decades from 1990-2010 has outpaced the national growth rate by roughly 0.2 percentage points per year [CMS National Health Statistics, MAFA Estimates], it has generally improved health determinants and outcomes at a rate equal to or greater than the U.S. [United Health Foundation, 2011]

While we have been unable to assemble an “all-payer” (Private, Medicare, Medicaid, etc.) database to deconstruct cost growth into population, enrollment, inflation, utilization, and intensity components, we have preliminary data from the Alaska Medicaid program over a recent 12 year period (1997-2009).

Alaska Medicaid: Total Cost Growth and Cost Growth Components (1997-2009)						
	INDEX (1997 = 1.00)					
	Total Cost	Population Growth	Enrollment Rate	Utilization of Services	Intensity of Service	Medical Price Inflation
1997	1.00	1.00	1.00	1.00	1.00	1.00
1998	1.09	1.01	0.98	1.09	0.97	1.03
1999	1.27	1.03	1.06	1.24	0.97	1.05
2000	1.50	1.04	1.23	1.45	0.92	1.09
2001	1.81	1.05	1.29	1.60	0.99	1.14
2002	2.20	1.06	1.35	1.72	1.12	1.20
2003	2.62	1.07	1.41	1.83	1.25	1.26
2004	2.94	1.09	1.44	1.90	1.32	1.32
2005	3.12	1.10	1.46	1.95	1.31	1.38
2006	3.18	1.11	1.47	1.98	1.24	1.43
2007	3.10	1.12	1.43	1.90	1.20	1.47
2008	3.14	1.13	1.39	1.89	1.16	1.53
2009	3.43	1.15	1.42	1.94	1.21	1.60

It is interesting to note that as utilization of services (how many different types of services were used) and intensity (how frequently were each type of service used) have flattened or declined since 2004-2006, population, enrollment and medical price inflation have combined for an annual average growth rate of 2.4%, falling slightly behind consumer price inflation (2006-2009).

Projected Growth in Spending – AK & US

To estimate Alaska health care expenditure growth for 2010-2020, we started with the National Health Care Expenditure projections developed by CMS and adjusted them for differences in Alaska's population growth and change in age mix. We assumed that Alaska inflation, utilization of medical services and medical service price inflation would track the U.S. The comparison is summarized in Table 2 below.

Table 2. Annual Health Care Expenditure Projection [2010-2020] Compound Annual Growth Factors – Percentage Points (AK – MAFA, U.S. – CMS)		
	Alaska	U.S.
Population growth & age mix	1.8	1.5
General economy wide inflation	2.4	2.4
Increased utilization of medical services	1.4	1.4
Medical service price inflation	1.2	1.2
TOTAL Compound Annual Growth Rate	6.8	6.5

Based on national trends in health technology and continuing deployment of new technology in Alaska, combined with a rapidly growing senior population compared to the U.S., and the health insurance expansions and utilization associated with the Patient Protection and Affordable Care Act (PPACA), we project health care spending in Alaska to reach roughly \$14.5 billion in 2020, reaching roughly 75% of the wellhead value of oil produced in Alaska [MAFA Analysis, 2011].

Given the importance of oil as a key economic driver in the Alaska economy [ISER, Goldsmith, 2011], the increase in health care expenditures from 16% to 75% of the wellhead value of oil from 1990 to 2020 raises questions regarding the long term sustainability of the health care cost trend.

Part of the growth in excess of growth in oil wealth has been covered by growth in the portion of Alaska's health care expenditures that have been covered by the Federal Government (33% to 39%; 1990-2010). The Federal Government portion of Alaska health care expenditures is expected to grow another six percentage points to 45% by 2020.

Independent analysis of federal health programs and federal health spending also raise questions regarding long term sustainability of federal support.

Medicare Cost Growth Concerns (U.S.)²

The rate of growth of total health care and Medicare cost has averaged roughly 2.5 percentage points above the rate of gross domestic product (GDP) growth annually over each of the last several decades. Over the period 1999-2008, Medicare grew at an even faster rate than this historic average, 2.8 percentage points faster than GDP. If Medicare continues to grow 2.5 percentage points faster than GDP, four percentage points of GDP will shift to Medicare over the next 15 years.

Given the historic unwillingness of the American electorate to allocate much more than 18 percent of GDP to the federal government in tax revenue, this potential rapid four percentage point shift to Medicare may lead to a collision of interests with reverberations outside of health policy to the entire economy.

This collision cannot be avoided by borrowing. Most economists, as well as the CBO, believe that if the debt-to-GDP ratio rises to the 80-90 percent range, there is a substantial risk of a vicious downward cycle. Buyers of Treasury bonds could lose confidence that they will earn a positive return – net of inflation – and begin to demand higher real interest rates, crimping future economic growth.

If a substantial portion of the Medicare reductions called for in the [PPACA] health reform are not made, further borrowing is off the table, and commensurate cuts cannot be made elsewhere in the budget, taxes will need to increase to finance Medicare. If the historic rate of health spending increase that has gone on over the past 40 years continues for the next 40 until 2050, income taxes will have to increase by more than 160%. The middle bracket could go from 25% to 66% and the top bracket could go from 35% to 92%.

3. What drives health care cost growth?

Conventional wisdom from the economics literature is that technology, income and insurance coverage have been the primary drivers of health care cost growth since the World War II. [Folland, 2007]

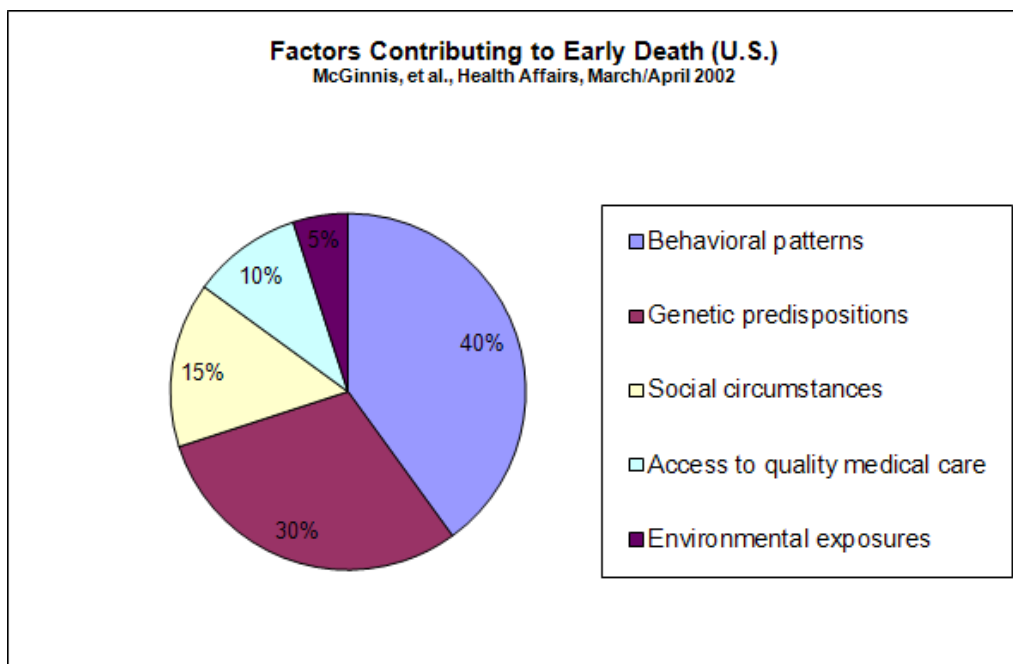
² Summary of selected paragraphs from Joseph P. Newhouse, "Assessing Health Reform's Impact on Four Key Groups of Americans", Health Affairs, Vol. 29, No. 9 (September 2010), 1714-1724, pages 1719-1721

Recent analysis of the growth in U.S. health expenditures from 1960-2007 by Smith, Newhouse and Freeland suggests that if Medical care productivity is somewhere between zero and the average of the economy as a whole, then income and insurance may explain roughly 39% of the growth, technology 48%, and demographics and medical price inflation make up the balance (13%).³

Going forward, income growth will continue to drive a rising health share of GDP in decades to come, *as spending on new medical technologies continues to increase more rapidly than incomes*. Ultimately, this effect must diminish as the opportunity cost of additional growth in health spending rises – exacting a growing trade-off in the foregone consumption of all other goods and services.⁴

4. What drives health outcomes?

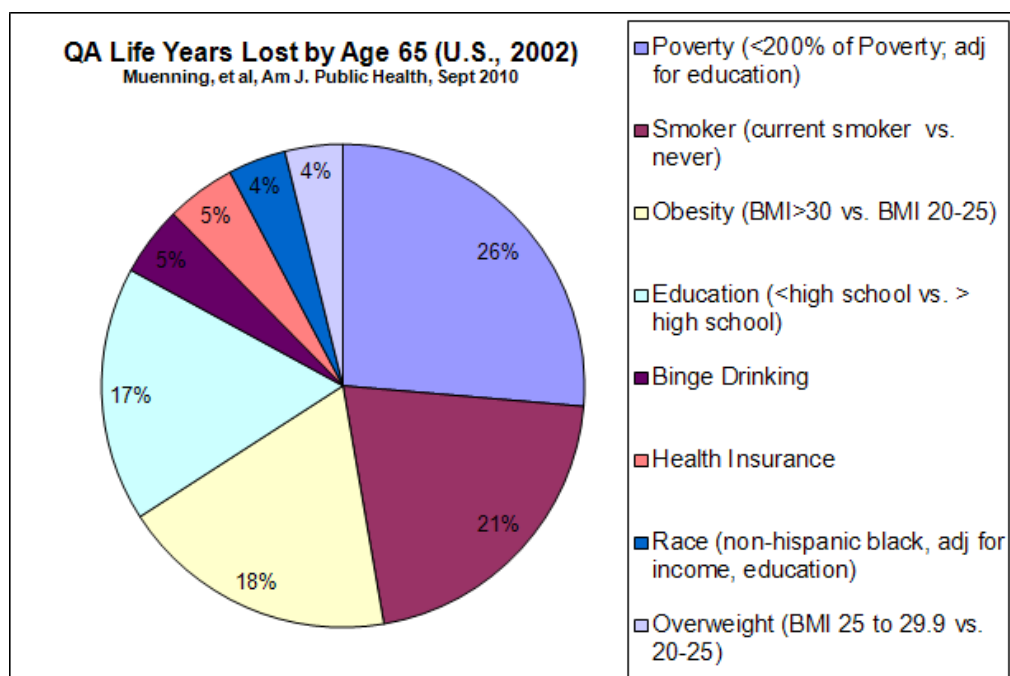
In an analysis of early (preventable) deaths published in 2002, access to quality medical care was found to be a relatively small contributor to health outcomes (10%) compared to behavior, genetics, and social circumstances. See figure below.



In an analysis of quality adjusted life years lost by age 65, published in 2010, health insurance was found to only contribute 5% to health outcomes. See figure below.

³ Sheila Smith, Joseph P. Newhouse and Mark S. Freeland, “Income, Insurance, And Technology: Why Does Health Spending Outpace Economic Growth?” Health Affairs, September 2009, Vol. 28, No. 5, 1276-1284.

⁴ Ibid.



5. How do we ensure we are getting good value for our health care investments?

- 5.1. First, it is helpful to remember that while health insurance and access to medical care is an important part of health, it has a relatively small impact on health. Basic health promotion that emphasizes individual and behavior and community social setting and support may be five times more important to health outcomes than health insurance and access to medical care.
- 5.2. Second, a substantial portion of medical care expenditures are made without regard to whether they are clinically effective, let alone cost effective or even potentially cost saving measures. If we are to ensure that we are getting good value for our health care investments as individuals and as taxpayers, we need to ensure that clinical effectiveness and cost effectiveness of health and medical interventions get serious consideration.⁵
- 5.3. Third, the health care payment and financial system is fraught with opportunities to shift costs among and between various stakeholders. Employers have been increasing their allocation of health insurance costs to employees. There is evidence that Medicaid and Medicare pay providers less than average cost and private insurance pays more than average cost. New reform initiatives should focus on striving for overall system effectiveness and efficiency and avoid quick fixes that simply shift challenges from one payer to another or down the road to the next generation.

⁵ See John E. Wennberg, *Tracking Medicine: A Researcher's Quest to Understand Health Care*, Oxford University Press, 2010, Chapter 6 "Learning What Works and What Patients Want", Chapter 7 "Comparative Effectiveness Research"